



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,537	09/28/2001	Yeong Jong Shin	K-261	2652
34610	7590	12/13/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			HYUN, SOON D	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

APR

Office Action Summary	Application No. 09/964,537	Applicant(s) SHIN, YEONG JONG	
	Examiner Soon D. Hyun	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-23 and 25 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-23 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1, 3-5, 8-14, 17, 18, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al ((U.S. Patent no. 6,069,871) in view of Chheda et al (U.S. Patent No. 6,038,448).

Regarding claims 1, 8, 10-12, 14, 17, and 21-23, Sharma et al (Sharma) discloses a method for performing a handoff between mobile communication networks, comprising:

performing a first soft handoff from a first base station or cell A (802 in FIG. 8) of a first communication network (a network using a carrier frequency F2) to a first sector of a gateway base station or cell G (804 in FIG. 8) when a pilot signal strength from the gateway base station greater than that of the first base station (col. 12, lines 49-56);

performing an inter-sector hard handoff from the first sector (sector j) of the gateway base station to a second sector (sector k) of the gateway base station when a pilot signal strength of the gateway base station exceeds that of a pilot signal strength from the first base station; and

Art Unit: 2661

performing a second soft handoff from the second sector (sector k) of the gateway base station to a second base station (806 in FIG. 8) of a second communication network (a network using a carrier frequency F1) when a pilot signal strength of the second base station exceeds a threshold value (col. 12, lines 49-56).

However, Sharma does not explicitly teach that threshold values as recited in claims.

Chheda et al (Chheda) discloses a method of performing handoff when a mobile station moves a first cell (614) to a first sector (616 B) of a second cell (616) to a second sector (626 B) of the second cell and finally to a third cell (618) (FIG. 6, col. 11, lines 48-50) and the method comprises the steps of performing a first handoff from the first cell to the first sector of the second cell (col. 11, lines 63-65) when a pilot signal strength from the second cell exceeds a threshold value (col. 12, lines 9-14), performing an inter-sector handoff from the first sector of the second cell to the second sector of the second cell when a pilot signal strength of the first base station meets a drop threshold value (col. 8, lines 6-18), and performing a second handoff from the second sector of the second cell to the second cell when a pilot signal strength of the cell B exceeds a threshold value (col. 12, lines 9-14).

Those of skill in the art would have been motivated by Chheda to incorporate the method of handoff taught by Chheda into Sharma with the thresholds when the mobile station (810) initially communicating with the first cell (820) moves to the gateway cell (804) and finally moves to the second cell (806).

Art Unit: 2661

It would have been obvious to one having ordinary skill in the art to incorporate the method of handoff taught by Chheda into Sharma to maintain the communication.

Regarding claim 3, Sharma further discloses that the first and second handoffs are a soft handoff (col. 11, lines 37-59).

Regarding claims 4, 9, and 13, Sharma further discloses that the first base station (802) and the first sector (j) of the gateway base station (804) operate at a first frequency (F2) and the second sector (k) of the gateway base station and the second base station operate at a second frequency (F1) and the first and second sectors of the gateway base station comprise an overlap area of the first and second base stations.

Regarding claim 5 and 18, Sharma does not explicitly teach that each of the first base station, the second base station and the gateway base station, respectively connected to a respective base station controller. It would have been obvious to one having ordinary skill in the art to connect the each of the base stations to a respective base station controller unexpected results can be seen from the use of the controllers.

3. Claims 6, 7, 15, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al ((U.S. Patent no. 6,069,871) and Chheda et al (U.S. Patent No. 6,038,448) further in view of Jalloul et al (U.S. Patent No. 6,768,908).

Sharma + Chheda does not teach that the first communication network is CDMA 2G and the second communication network is CDMA 3G. Jalloul et al

Art Unit: 2661

(Jalloul) teaches a soft handoff method for CDMA 2G (IS-95B) and CDMA 3G (IS-95C), see col. 3, lines 1-12.

Those of skill in the art to have been motivated by Jalloul to incorporate a handoff method between CDMA 2G and CDMA 3G by performing hard handoff, because a hard hand off is simpler than a soft hand off.

Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a hard handoff between CDMA 2G and CDMA 3G into Sharma + Chheda.

Allowable Subject Matter

4. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2661

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon D. Hyun whose telephone number is 571-272-3121. The examiner can normally be reached on M-F.

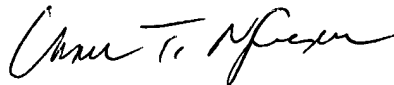
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Hyun
12/09/2005



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600